

## ATTACHMENT - REMARKS

### Remarks

#### Status of the Claims

Following entry of the accompanying Request for Continued Examination and amendments, claims 8, 9, 12, and 13 will stand for consideration, wherein claims 8 and 12 have been amended.

#### Claim Rejections – 35 USC 103

##### Claims 8-9 and 12

Claims 8-9 and 12 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art (AAPA) in view of Brown et al. (U.S. Patent No. 7,088,972) (hereinafter "Brown"). This rejection is respectfully traversed, although independent claim 8 and dependent claim 12 have been amended as discussed below.

Claim 8, as amended, recites an improvement to a transmitter apparatus for sending a data transmission over power lines of an electrical power network, comprising,

wherein the transmitter apparatus for sending the data transmission signal over power lines of the electrical power network is divided and separated into at least a first part and a second part connected by one of a signal cable, an optical fiber, and a wireless connection, said first part including at least the signal shaping and adjustment devices for generating the data transmission signal, and said second part including at least the signal amplifier, a connecting unit for coupling the data transmission signal to the electrical power network, and the connecting cable connecting said second part at least near to phase and zero rails or to a wall outlet of the electrical power network;

wherein the first part steers operation of the second part over the one of the signal cable, the optical fiber, and the wireless connection; and

wherein the length of the connecting cable is under 5 m.

AAPA, in Fig. 1 and the related description, shows functions of the first part and the second part being in the same apparatus enclosure, and describes the related impact being attenuation of the data transmission signal. It is submitted that Brown adds nothing that addresses the attenuation problem of AAPA.

Brown concerns "an adaptive data communication microwave transmitter having a distributable architecture of modular components, ... to provide substantial improvement in flexibility of use ..." (col. 1, lines 16-24). The distributed data transmitter of Brown is directed at "inflexible characteristics" (i.e., data throughputs, data rates, deviations, spectrums, analog modulations, power capacity, etc.) and physical size considerations (e.g., in a flight vehicle), of prior art microwave transmitters.

A reference is considered analogous, and, therefore, available for use in an obviousness rejection if it is either (1) within the field of the inventor's endeavor, or (2) reasonably pertinent to the particular problem with which the inventor was involved. In re Deminski, 796 F.2d 436, 442 (Fed. Cir. 1986).

Brown does not relate in any way to a transmitter apparatus for sending a data transmission over power lines of an electrical power network (i.e., Power Line Communication (PLC)) because the power considerations described therein relate only to powering the transmitter and not using the power lines as actual communication connections. Brown is not within the field of the inventor's endeavor because Brown does not relate in any way to Power Line Communication. Further, Brown is not "reasonably pertinent" to attenuation of a data transmission signal in a Power Line Communication system. Thus, it is respectfully submitted that Brown is not an analogous reference for use in rejecting claim 8.

In the Office Action, it is stated that "the claims are not limited to a power line communication system, said limitation only appears in the preamble of the claim, and therefore the recitation has not been given patentable weight because the recitation occurs in the preamble."

Amended independent claim 8 now affirmatively recites the "transmitter apparatus" being "for sending the data transmission signal over power lines of the

electrical power network." Accordingly, it is respectfully submitted that the claims are limited to a power line communication system, and Brown is not an analogous reference for use in rejecting claim 8.

Further, amended independent claim 8 recites "said second part including at least the signal amplifier, a connecting unit for coupling the data transmission signal to the electrical power network, and the connecting cable connecting said second part at least near to phase and zero rails or to a wall outlet of the electrical power network."

It is alleged in the Office Action that "Brown further teaches said second part (16) including at least the signal amplifier (48 or 50) and a connecting unit (connection to DC power at item 18, see col. 8 lines 54-64) for connection to the electrical network (DC power supply network) and the connecting cable connecting said second part at least near to phase and zero rails (rails associated with supply of DC supply) outlet (item 22) of the electrical network." However, nowhere does the Office Action allege that Brown discloses a connecting unit for coupling the data transmission signal to the electrical power network.

The Office Action refers to MPEP 2111 regarding the "broadest reasonable interpretation of the claims, consistent with the specification." However, it is respectfully submitted that "a connecting unit (connection to DC power at item 18 ...)," as disclosed in Brown, cannot be considered as a teaching or even a suggestion of a connecting unit for coupling the data transmission signal to the electrical power network, as recited in amended independent claim 8, because the device of Brown does not couple a data transmission signal to an electric power network. Accordingly, it is respectfully submitted there is no reason that one of ordinary skill in the art would combine Brown, which is completely unrelated to coupling a data transmission signal to an electrical power network, with AAPA to address the attenuation problem of AAPA.

Still further, amended independent claim 8 recites "wherein the transmitter apparatus ... is divided and separated into at least a first part and a second part connected by one of a signal cable, an optical fiber, and a wireless connection ...; wherein the first part steers operation of the second part over the one of the signal cable, the optical fiber, and the wireless connection."

Neither AAPA nor Brown, however combined, provided a teaching or even a suggestion of the aforementioned features. Thus, it is respectfully submitted that the asserted combination is deficient with respect to the aforementioned features. Accordingly, withdrawal of the rejection of amended independent claim 8 is respectfully requested.

Claims 9 and 12 depend from amended independent claim 8, and are allowable for at least the reasons provided in support of the allowability of amended independent claim 8.

Further, claim 12 has been amended to clarify that the connecting cable can be connected to 4-phase voltage rails in a direct-current network electrical power line or an alternating-current network electrical power line or to another connection point of a network-cable an electrical power line.

#### Claim 13

Claim 13 has been rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA in view of Brown and further in view of Carson et al. (U.S. Patent No. 7,007,305) (hereinafter "Carson"). This rejection is also respectfully traversed.

Claim 13 depends from amended independent claim 8, and is allowable over the combination of AAPA and Brown for the reasons discussed above with respect to claim 8.

Carson is cited as teaching "the use of a PLC system and transmitter (50 and 60) which can be connected to 3 phase rails (col. 6, lines 10-20) at another connection point of a network cable.

Carson provides "a repeater amplifier circuit for boosting weak control signals on a PLC network, with noise discrimination and signal firewall protection" (col. 1, lines 9-12). The repeater amplifier circuit of Carson only repeats with greater voltage amplitude received, weak PLC signals being transmitted to an electric network. It is respectfully submitted that Carson does not add anything that would remedy the aforementioned deficiencies in the combination of AAPA and Brown. Accordingly, favorable reconsideration and withdrawal of the rejection of claim 13 are respectfully requested.

## Conclusion

In light of the Amendments and Remarks, Applicants respectfully request early and favorable action with regard to the present application, and a Notice of Allowance for all pending claims is earnestly solicited.

Should there be any outstanding issues requiring discussion that would further the prosecution and allowance of the above-captioned application, the Examiner is invited to contact the Applicants' undersigned representative at the address and telephone number indicated below.

Respectfully submitted,

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